REMARKS/ARGUMENTS

Favorable reconsideration of this application, in light of the following discussion, is respectfully requested.

Claims 1-3, 5, and 11-16 are pending.

The outstanding Official Action rejected Claims 1-3, 5, and 11-16 under 35 U.S.C. § 102(e) over U.S. Patent Application Publication No. 2004/0078491 to Gormish et al. (hereinafter "Gormish").

Applicants respectfully traverse the rejection of the claims under 35 U.S.C. § 102(e) for the following reasons.

Claim 1 is directed to an image processing apparatus the exchanges image data between a first device and a second device. The image processing apparatus includes, *inter alia*, (1) acquisition means for acquiring a target division level that is a wavelet division level supported by the first device; (2) checking means for checking a difference between the target division level and a wavelet division level in a code stream of the second device; (3) reading means for reading coded data responsive to a check result of the checking means from the code stream; (4) decoding means for decoding wavelet coefficients from the coded data read by the reading means; (5) generating means for generating LL component data of the target division level by performing an inverse wavelet transform on the wavelet coefficients decoded by the decoding means; and (6) changing means for changing the wavelet division level of the code stream by embedding in the code stream the LL component data coded by the coding means.

By way of summary, Applicants' present invention facilitates transmission of an encoded stream from a first device to a second device supporting different wavelet division levels. Applicants submit that one of ordinary skill in the art would understand the claimed term "wavelet division level" to correspond to the number of iterations that a 2-D wavelet

transform is performed on an image. For example, Applicants' Figure 2C illustrates a first device supporting a wavelet division level of 2 while Figure 2D illustrates a second device supporting a wavelet division level of 3.

Applicants' claimed invention is directed to matching a wavelet division level between the first and second device without decoding all the coded data when the wavelet division levels supported by the first and second devices differ. To this end, Applicants' claimed invention includes acquisition means for acquiring a target division level that is a wavelet division level in a code stream of the second device compressed and encoded according to a JPEG 2000 algorithm. By use of the outcome of the checking by the checking means, the claimed invention can match a wavelet division level to the wavelet division level supported by the hardware.

Turning now to the applied reference, Gormish describes a method for transporting portions of a codestream over a communications mechanism.[1] Figure 1 of Gormish illustrates a client and a server. The outstanding Official Action identifies the server as the first device and the client as the second device.[2] The server contains a JPEG 2000 file that contains at least one JPEG 2000 codestream which can be decompressed to obtain an image 102. The system delivers portions of the JPEG 2000 codestream 101 to the client over a return channel 104. The client is able to use just the received tile-parts 103 as a legal JPEG 2000 codestream and decode these to form some part of the image 105.[3]

Gormish describes that the client can make a request to the server as an image object request.[4] Gormish further describes that image objects are regions of a screen or sheet of paper where it is desirable to place an image and the uncompressed color converted bits that should fill those regions. Gormish describes a byte range converter at the server side that is

[1] See Gormish at paragraph [0010].
[2] See Official Action dated March 2, 2007 at page 2.
[3] See Gormish at paragraph [0019].
[4] See Gormish at paragraph [0019] and [0027].

responsible for converting compressed image object requests to byte range requests. The converter returns the requested image objects after determining the location of the request, where the location refers to the byte range of a tile part in a JPEG 2000 file.[5]

Claim 1 is distinguishable over Gormish as the applied reference fails to disclose or suggest *acquisition means for acquiring a target division level that is a wavelet division level supported by a first device.* The outstanding Official Action asserts that paragraph [0019], lines 1-2 of Gormish disclose this feature.[6] This cited portion of Gormish merely describes that a server contains a JPEG 2000 codestream of an image while the client makes a request to receive tile parts of the image as image objects. While the client requests are converted to byte ranges at the server side, Gormish fails to disclose or suggest that a *target division level that is a wavelet division level* is acquired for the server. More particularly, decoding a JPEG 2000 codestream to obtain a requested image object is different from *acquiring a wavelet division level* because the requested image object merely translates to a byte range corresponding to a location of the image, not a wavelet division level used in the JPEG 2000 codestream.

Furthermore, Claim 1 is distinguishable over Gormish as the applied reference fails to disclose or suggest *checking means for checking a difference between the target division level and a wavelet division level in a codestream of a second device.* The outstanding Official Action asserts that paragraph [0050] of Gormish discloses this feature.[7] This cited portion of Gormish merely describes that an image object is created from a byte range response. For example, if a particular byte range is determined to correspond to a particular image tile, the byte range can be converted to a response in image object terms.[8] However, Gormish fails to disclose or suggest that when a byte range is converted to a response in image object terms,

[5] See Gormish at paragraph [0062].
[6] See Official Action of March 2, 2007 at page 3.
[7] See Official Action dated March 2, 2007 at page 3.
[8] See Gormish at paragraphs [0050] and [0056].

the server *checks a difference between a wavelet division level at the server and a wavelet division level* at the client. Moreover, converting a byte range to an image object is different from *checking a difference between wavelet division levels* because the conversion between the byte range to the image object is independent of the wavelet division level in the codestream.

As the remaining features in Claim 1 are tied into the first two features of Claim 1, Applicants respectfully submit that Gormish fails to disclose or suggest at least (1) reading means for reading coded data responsive to a check result of the checking means from the code stream; (2) decoding means for decoding wavelet coefficients from the coded data read by the reading means; and (3) generating means for generating LL component data of the target division level by performing an inverse wavelet transform on the wavelet coefficients decoded by the decoding means.

Additionally, Gormish fails to disclose or suggest *changing means for changing the wavelet division level of the code stream by embedding in the code stream the LL component data coded by the coding means*. The outstanding Official Action asserts that paragraph [0048], lines 5-8 of Gormish disclose this feature.[9] This portion of Gormish describes that "[i]n case the viewport changes, and the corresponding relevant tiles also change, then only the tiles that have not been sent earlier are sent to update the display image."[10] Thus, Gormish is describing the feature of updating the image display when the client receives the image tiles.

However, Gormish merely describes that when image tiles are received, the client "decode[s]...[the image tiles] to form some part of the image." Decoding an image for viewing is not *changing a wavelet division level of the code stream by embedding in the code*

[9] See Official Action dated March 2, 2007 at page 3.
[10] See Gormish at paragraph [0019].

stream the LL component data as required by Claim 1 because the decoding merely transforms the image data in a format suitable for viewing the image rather than *embedding* in a code stream LL component data (i.e. data coded by the wavelet transform) *to change the wavelet division level* of the codestream.

Accordingly, Applicants submit that Gormish fails to disclose or suggest the features of Claim 1. Thus, Applicants request that the rejection of Claim 1, and the claims depending therefrom, under 35 U.S.C. § 102(e) be withdrawn.

As Claim 12 is a method claim reciting features analogous to Claim 1, Applicants submit that Gormish fails to disclose or suggest the features of Claim 12. Accordingly, Applicants request that the rejection of Claim 12, and the claims depending therefrom, under 35 U.S.C. § 102(b) be withdrawn.

Consequently, in view of the present response, no further issues are believed to be outstanding in the present application. The present application is believed to be in condition for formal allowance. A Notice of Allowance is earnestly solicited.

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